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O MODULE LIBSIN
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BEGIN

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16-Sep-1984 01:04:01 14-Sep-1984 12:39:06

VAX-11 Bliss-32 V4.0-742

[LIBRTL.SRC]LIBINTOVE.B32:1

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! FACILITY: Utility Library

ABSTRACT:

LIB\$INT\_OVER enables or disables integer overflow for the calling procedure activation. The previous setting of the enable is returned as a value.

ENVIRONMENT: User mode, re-entrant, AST level or not or mixed.

AUTHOR: CREATION DATE: 8-Oct-77 Thomas N. Hastings

MODIFIED BY:

Thomas N. Hastings, 8-Oct-77: VERSION O original

- Declare PSECTs. TNH 19-Dec-77

- Change to STARLET Library. DGP 20-Apr-78 - Set proper stack frame. TNH 21-Apr-78 0-03 0-04

0-05

- Change REQUIRE files for VAX system build. DGP 28-Apr-78
- Change STARLET to RTLSTARLE to avoid conflicts. DGP 1-May-78
- Change the file name to LIBINTOVE.B32, and change the name of the REQUIRE file similarly. JBS 14-NOV-78 0-06 0-07

1-001 - Update version number and copyright notice. JBS 16-NOV-78

1-002 - Use prologue file. SBL 24-June-1983

LIBSINT_OVER	Enable/disable integer overflow traps	I 2 16-Sep-1984 01:04:01 14-Sep-1984 12:39:06	VAX-11 Bliss-32 V4.0-742 [LIBRTL.SRC]LIBINTOVE.B32;1
: 59 : 60 : 61	0058 1 ! 0059 1 ! PROLOGUE FILE: 0060 1 !		
; 62 ; 63 ; 64 ; 65	0061 1 0062 1 REQUIRE 'RTLIN:LIBPROLOG'; 0133 1 0134 1 '	! LIB\$ definitions	
66 67 68	0135 1		
; 69 ; 70   71   72	0138	! Enable/disable intege	r overflow
73 74 75	0142 1 ! 0143 1 ! MACROS: 0144 1 !		
59 612 665 667 667 667 667 77 77 77 77 77 77 77 77	0058 1   PROLOGUE FILE: 0060 1   0061 1 0062 1 REQUIRE 'RTLIN:LIBPROLOG'; 0133 1   TABLE OF CONTENTS: 0136 1   0137 1 0138 1 FORWARD ROUTINE 0139 1 0140 1 LIB\$INT_OVER; 0141 1 0142 1   0143 1   MACROS: 0144 1   0145 1 0146 1   0147 1   EQUATED SYMBOLS: 0148 1   0149 1 0150 1   0151 1   OWN STORAGE: 0152 1   0153 1   0154 1   0155 1   EXTERNAL REFERENCES: 0156 1   0157 1		
81 82 83 84	0150 1 ! 0151 1 ! OWN STORAGE: 0152 1 ! 0153 1		
85 86 87 88	0154 1 ! 0155 1 ! EXTERNAL REFERENCES: 0156 1 ! 0157 1		

Page 2 (2)

```
16-Sep-1984 01:04:01
14-Sep-1984 12:39:06
                                                                                                                                           VAX-11 Bliss-32 V4.0-742 [LIBRTL.SRC]LIBINTOVE.B32;1
LIB$INT_OVER
                         Enable/disable integer overflow traps
                                                                                                                                                                                                             (3)
                                                                                                                                                                                                     Page
1-002
                                                                            VER ( ! Enable/disable integer overflow ! Adr. of longword containing new setting ! Value is old setting
                                      GLOBAL ROUTINE LIBSINT_OVER (
                         0158
0159
      91
                                                  NEW_SETTING)
      93459998
96798
                         0160
                         0161
                         0162
                                      ! FUNCTIONAL DESCRIPTION:
                         0164
                                                  LIB$INT_OVER enables or disables integer overflow for the calling procedure activation. The previous setting of the enable is returned as a value.
                         0166
0167
0168
      99
    100
    101
102
103
104
105
                         0169
                                         FORMAL PARAMETERS:
                         0170
0171
0172
0173
0174
0175
0176
0177
0178
0179
                                                                                        Adr. of longword containing new enable setting. Bit 0 = 1 is enable, bit 0 = 0 is disable.
                                                   new_setting.rlu.r
    106
                                         IMPLICIT INPUTS:
    108
109
                                                   NONE
    110
                                         IMPLICIT OUTPUTS:
    111
    112
                         0180
                                                   NONE
                         0181
    114
                         0182
                                         ROUTINE VALUE:
    116
                         0184
                                                                                                     previous contents of SRM$W_PSW[PSW$V_IV]
in the callers frame.
                                                   OLD_SETTING.wlu.v
                         0185
                         0186
0187
    118
    COMPLETION CODES:
                         0188
                         0189
                                                   NONE
                         0190
                         0191
                                         SIDE EFFECTS:
                         0192
0193
                                                  The callers stack frame will be modified.
                         0194
                         0196
0197
                                            BEGIN
                         0198
0199
                                            LOCAL
                         0200
0201
0202
0203
0204
0205
0206
0207
0208
0209
                                                   OLD_SETTING;
                                                                                        ! store the old SETTING of integer overflow enable
                                            BUILTIN
                                                   FP:
                                            MAP
                                            NEW_SETTING: REF VECTOR[1, LONG],
FP: REF BLOCK[.BYTE];
OLD_SETTING = .FP[SF$V_IV];
FP[SF$V_IV] = .NEW_SETTING[0];
RETURN .OLD_SETTING;
                                                                                                                ! Scalar call-by-reference
                                            END;
                                                                                         !End of LIB$INT_OVER
```

.TITLE LIB\$INT\_OVER Enable/disable integer overflow traps
.IDENT \1-002\

K 2 16-Sep-1984 01:04:01 14-Sep-1984 12:39:06 LIBSINT\_OVER 1-002 Enable/disable integer overflow traps VAX-11 Bliss-32 V4.0-742 [LIBRTL.SRC]LIBINTOVE.B32;1 Page (3) \_LIB\$CODE,NOWRT, SHR, PIC,2 .PSECT : 0158 : 0206 : 0207 : 0209 LIB\$INT\_OVER, Save nothing #5, #1, 4(fP), OLD SETTING aNEW\_SETTING, #5, #1, 4(fP) 0000 00000 .ENTRY 50 AE EF 00002 FO 00008 01 05 05 BC INSV 04 0000F RET ; Routine Size: 16 bytes, Routine Base: \_LIB\$CODE + 0000

5 (4)

Page

LIB\$INT\_OVER Enable/disable integer overflow traps 1-002

16-Sep-1984 01:04:01 14-Sep-1984 12:39:06

VAX-11 Bliss-32 V4.0-742 [LIBRTL.SRC]LIBINTOVE.B32;1

: 143

\_LIB\$CODE

0210 1 END 0211 0 ELUDOM !End of module

PSECT SUMMARY

Name Bytes

Attributes

16 NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

	Symbols			Pages	Processing
file	Total	Loaded	Percent	Mapped	Time
_\$255\$DUA28:[SYSLIB]STARLET.L32;1 _\$255\$DUA28:[LIBRTL.OBJ]RTLLIB.L32;1	9776 36	1 0	0	581 8	00:00.7 00:00.0

## COMMAND QUALIFIERS

BLISS/CHECK=(FIELD, INITIAL, OPTIMIZE)/NOTRACE/LIS=LIS\$:LIBINTOVE/OBJ=OBJ\$:LIBINTOVE MSRC\$:LIBINTOVE/UPDATE=(ENH\$:LIBINTOVE

Size: 16 code + 0 data bytes Run Time: 00:02.0

Run Time: 00:02.0 Elapsed Time: 00:14.8 Lines/CPU Min: 6267

; Lines/CPU Min: 6267 ; Lexemes/CPU-Min: 10158 ; Memory Used: 30 pages ; Compilation Complete 0208 AH-BT13A-SE

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